AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims

1. (Currently Amended) A computer-based lecture recording and reproducing method using a computer, in which the computer includes an information inputting unit for inputting handwriting information during a lecture, a voice inputting unit for inputting voice information during the lecture, a voice outputting unit for outputting the reproduced voice information, and a lecture recording and reproducing program for recording information inputted from the information inputting unit and the voice inputting unit and for reproducing the recorded information, the method comprising:

executing the lecture recording and reproducing program to display a window on a screen;

recording the lecture, including:

storing information inputted from the information inputting unit and information relating to the information inputted from the information inputting unit in a memory of the computer together with time information and storing voice information inputted from the voice inputting unit in the memory of the computer;

writing pre-stored information in a lecture file and the information inputted from the information inputting unit on an assigned area in the memory of the computer together with a shape of graphic tool by using the pre-stored information relating to the lecture file in the memory of the computer and the information relating to the information inputted from the information inputting unit so as to be equal to a configuration displayed on the screen; and

displaying information written on the assigned area in the memory of the computer on the window of the screen; and

reproducing the recorded lecture, including:

storing information of the lecture file and the related information in the memory of the computer;

writing sequentially the information of the lecture file on the assigned area in the memory of the computer together with the shape of graphic tool by using the related information; and

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displaying the information written on the assigned area in the memory of the computer on the window of the screen and outputting the voice information through the voice outputting unit,

wherein the information of the lecture file includes lecture plan/schedule information, handwriting information and drawing information; and

wherein a region of the lecture plan/schedule information stores a location for the lecture plan/schedule to be displayed, an actual size of the lecture plan/schedule, a type of the lecture plan/schedule, start location information of each image in the lecture file when at least one lecture plan/schedule is used, the lecture plan/schedule information, size information of the lecture plan/schedule file, a start time for the lecture plan/schedule to be displayed, a time when the lecture plan/schedule is deleted.

2. (Previously Presented) The method of claim 1, wherein the graphic tool is displayed in a pen shape when the handwriting information is inputted, and is displayed in an eraser shape when the inputted handwriting information is removed.

3. (Previously Presented) The method of claim 1, wherein the information of the lecture file is lecture plan/schedule information presented for the lecture in advance.

4. (Previously Presented) The method of claim 3, wherein the lecture plan/schedule information includes information captured from the screen.

5. (Previously Presented) The method of claim 4, wherein the lecture plan/schedule information includes a graphic image file.

6. (Canceled)

7. (Currently Amended) The method of claim 6 1, wherein the drawing information and the lecture plan/schedule information are stored before the recording or when the recording is momentarily paused.

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8. (Currently Amended) ~~The method of claim 6,~~ A computer-based lecture recording and reproducing method using a computer, in which the computer includes an information inputting unit for inputting handwriting information during a lecture, a voice inputting unit for inputting voice information during the lecture, a voice outputting unit for outputting the reproduced voice information, and a lecture recording and reproducing program for recording information inputted from the information inputting unit and the voice inputting unit and for reproducing the recorded information, the method comprising:

executing the lecture recording and reproducing program to display a window on a screen;

recording the lecture, including:

storing information inputted from the information inputting unit and information relating to the information inputted from the information inputting unit in a memory of the computer together with time information and storing voice information inputted from the voice inputting unit in the memory of the computer;

writing pre-stored information in a lecture file and the information inputted from the information inputting unit on an assigned area in the memory of the computer together with a shape of graphic tool by using the pre-stored information relating to the lecture file in the memory of the computer and the information relating to the information inputted from the information inputting unit so as to be equal to a configuration displayed on the screen; and

displaying information written on the assigned area in the memory of the computer on the window of the screen; and

reproducing the recorded lecture, including:

storing information of the lecture file and the related information in the memory of the computer;

writing sequentially the information of the lecture file on the assigned area in the memory of the computer together with the shape of graphic tool by using the related information; and

displaying the information written on the assigned area in the memory of the computer on the window of the screen and outputting the voice information through the voice outputting unit,

wherein the information of the lecture file includes lecture plan/schedule information, handwriting information and drawing information; and

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wherein the information relating to the information of the lecture file includes date and time information, version information, a recognizer, a comment, a start location of the handwriting information, a size of the handwriting information, a start location of the drawing information, a size of the drawing information, a start location of the lecture plan/schedule information, a size of the lecture plan/schedule information, a start location of voice information, a size of the voice information, resolution information, information relating to the lecture plan/schedule information, information relating to the handwriting information, and information relating to the drawing information.

9. (Currently Amended) ~~The method of claim 6,~~ A computer-based lecture recording and reproducing method using a computer, in which the computer includes an information inputting unit for inputting handwriting information during a lecture, a voice inputting unit for inputting voice information during the lecture, a voice outputting unit for outputting the reproduced voice information, and a lecture recording and reproducing program for recording information inputted from the information inputting unit and the voice inputting unit and for reproducing the recorded information, the method comprising:

executing the lecture recording and reproducing program to display a window on a screen;

recording the lecture, including:

storing information inputted from the information inputting unit and information relating to the information inputted from the information inputting unit in a memory of the computer together with time information and storing voice information inputted from the voice inputting unit in the memory of the computer;

writing pre-stored information in a lecture file and the information inputted from the information inputting unit on an assigned area in the memory of the computer together with a shape of graphic tool by using the pre-stored information relating to the lecture file in the memory of the computer and the information relating to the information inputted from the information inputting unit so as to be equal to a configuration displayed on the screen; and

displaying information written on the assigned area in the memory of the computer on the window of the screen; and

reproducing the recorded lecture, including:

storing information of the lecture file and the related information in the memory

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of the computer;

writing sequentially the information of the lecture file on the assigned area in the memory of the computer together with the shape of graphic tool by using the related information; and

displaying the information written on the assigned area in the memory of the computer on the window of the screen and outputting the voice information through the voice outputting unit,

wherein the information of the lecture file includes lecture plan/schedule information, handwriting information and drawing information; and

wherein the information relating to the handwriting information includes a stroke record and a point record, the stroke record including a total number of strokes, a pen thickness, a pen color, a start time of each stroke, an end time of each stroke, a kind of tool, background color information, a total number of points produced in the strokes, and point information indicating a previous stroke and a next stroke, the point record including a time when a point is produced, point location information, event information generated during the lecture recording, and point information indicating a previous point and a next point.

10. (Currently Amended) ~~The method of claim 6,~~ A computer-based lecture recording and reproducing method using a computer, in which the computer includes an information inputting unit for inputting handwriting information during a lecture, a voice inputting unit for inputting voice information during the lecture, a voice outputting unit for outputting the reproduced voice information, and a lecture recording and reproducing program for recording information inputted from the information inputting unit and the voice inputting unit and for · reproducing the recorded information, the method comprising:

executing the lecture recording and reproducing program to display a window on a screen;

recording the lecture, including:

storing information inputted from the information inputting unit and information relating to the information inputted from the information inputting unit in a memory of the computer together with time information and storing voice information inputted from the voice inputting unit in the memory of the computer;

writing pre-stored information in a lecture file and the information inputted from the information inputting unit on an assigned area in the memory of the computer

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together with a shape of graphic tool by using the pre-stored information relating to the lecture file in the memory of the computer and the information relating to the information inputted from the information inputting unit so as to be equal to a configuration displayed on the screen; and

displaying information written on the assigned area in the memory of the computer on the window of the screen; and

reproducing the recorded lecture, including:

storing information of the lecture file and the related information in the memory of the computer;

writing sequentially the information of the lecture file on the assigned area in the memory of the computer together with the shape of graphic tool by using the related information; and

displaying the information written on the assigned area in the memory of the computer on the window of the screen and outputting the voice information through the voice outputting unit,

wherein the information of the lecture file includes lecture plan/schedule information, handwriting information and drawing information; and

wherein the information relating to the drawing information includes a type of a drawing object, ‐a color of the object, a type of a pen, a thickness of the pen, a brush style, location information and layer information,

a free line object of the drawing object including region information having a start point and an end point of the free line, an object ID, a color used when the object is drawn, a color before the object is drawn, a pen thickness of the free line, a total number of points, layer information and location information on a first point,

a letter object of the drawing object including location information on a character string to be displayed, region information, font information, a size, a color, a background color, a background mode, layer information, character string information to be actually displayed.

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11. (Canceled)

12. (Previously Presented) The method of claim 9, wherein the stroke record is produced whenever an up or a down event occurs by the information inputting unit.

13. (Previously Presented) The method of claim 9, wherein the point record stores location information and time information according to the movement of the information inputting unit after the stroke record is generated.

14. (Previously Presented) The method of claim 1, wherein the lecture recording and reproducing program sets a system timer and reproduces information of the lecture file using the time information according to the system timer when the recorded lecture is reproduced .

15-16. (Canceled)

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